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(57) Abstract

An on-line system for facilitating a sale of an item. The system comprises a processor accessible to at least one buyer and to a seller via the Internet. The processor is configured to maintain an addressable web site for providing an interface to the buyers and seller. The processor is further configured to post, upon receipt from the seller, data corresponding to the item and to display to the buyers the data corresponding to the item. The processor is also configured to query the seller for a preferred transaction type, such as first-come-first-served, standard auction, or highest-sealed-bid. The seller may provide a minimum acceptable bid price and a time, and the processor will automatically re-post the item (e.g.-at a lower price) if, at the selected time, no bid has been entered by a buyer which is at least equal to the seller's minimum acceptable bid price.

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SYSTEM AND METHOD FOR PROVIDING AN ELECTRONIC BUSINESS-TO-BUSINESS EXCHANGE FOR BUYERS AND SELLERS

Cross-Reference to Related Applications

This application claims the benefit of priority from U.S. Provisional Patent Application No. 60/130,607 entitled SYSTEM AND METHOD FOR PROVIDING AN ELECTRONIC BUSINESS-TO-BUSINESS EXCHANGE FOR BUYERS AND SELLERS, filed on April 22, 1999.

Field Of The Invention

This invention relates to an on-line exchange, and more specifically to a system and method which provides an exchange for buyers and sellers.

Background Of The Invention

Many, if not all, companies have excess inventory and idle capital assets. Excess inventory may be identified as overstocks, discontinued items (such as last year's models), promotional items, seasonal items, mixed-up orders, surpluses, tail-end inventories, returned merchandise, label changes, misprints, factory overruns, overproduction and cancelled orders. Idle capital assets may be described as used factory equipment, surplus supplies and parts, used office equipment or furniture, and the like. For the purposes of this application, excess inventory and idle capital assets shall hereinafter be referred to collectively as "surplus assets."

These surplus assets represent a serious drag on a company's financial performance. For instance, each item of excess inventory represents an item which has been manufactured or purchased by the company but which has not been sold by

the company. Thus, every item of excess inventory is a loss to be borne by the company, until the excess inventory can be sold. Furthermore, idle capital assets, such as unused or under-utilized factory equipment or furniture represent an expense that has not contributed to the productivity of the company. In addition, surplus assets require storage space, which not only costs money but also prevents the use of the space for more productive enterprises.

In order to prevent the accumulation of surplus assets and to minimize the costs associated with it, many companies employ persons to dispose of these assets. However, the market for selling and distributing these assets is very inefficient when compared to the market for selling and distributing new goods. For instance, the market for new goods is typically standardized, in that the method of selling (e.g.- direct sales, telemarketing, etc.), the price and payment terms of the goods, the shipping arrangements, etc. are the same for each customer. The market for surplus assets is typically unstandardized. For instance, the method of selling surplus assets is often different for each customer, and the price, payment terms and shipping arrangements of the goods are required to be uniquely negotiated with each buyer. Because of this, it may on average be more labor and time intensive to sell surplus assets at little or no profit than it is to sell new goods at high profits.

Thus, there is a need for a system and method which provides a business-to-business exchange for companies seeking to buy and sell surplus assets.

Summary Of The Invention

The present invention, in accordance with various embodiments thereof, is directed to an on-line system and method which provides a business-to-business exchange for companies seeking to buy and sell surplus assets. Generally, the present invention employs a processor that maintains an addressable website which is accessible by users via the Internet. Sellers seeking to sell surplus assets register on the website by providing seller data which is stored in a database. The sellers list the items that they desire to sell on the website either as individual listings or as multiple listings, and a type of transaction, such as "first-come-first-served", "standard auction" or "highest-sealed-bid" is chosen.

Buyers looking to purchase surplus assets browse the listings. If the buyer desires to enter a bid or purchase a listed item, the buyer also registers on the website by providing buyer data which is stored in the database. The buyer may bid on items either individually or, if a multiple listings, on more than one item. Various modules of the system process the bids received by buyers and determine winning bids based on user-selectable criteria.

A rebalancer module is employed by the present invention to calculate which of the bids entered by a buyer is the winning bid. A multi-item optimizer operates in conjunction with the rebalancer module in order to optimize the calculations of the rebalancer in connection with bids for multiple item listings. A buyer autobid module

is employed to automatically increase the bid of a first buyer when a second buyer enters a higher bid. A seller auto-repost module is employed to automatically decrease the minimum acceptable bid entered by a seller when, at the close of an auction or bid, there are no bids that have been entered by buyers which equal or exceed the seller's minimum acceptable bid. An anonymous remailer system is employed in order to alter the buyer's and seller's e-mail addresses, thereby preventing the buyers and sellers from circumventing auction fees by arranging to conduct a sale off-site. A private sales module enables a seller to have a listing viewed or bid on by only a particular buyer or group of buyers.

Brief Description Of The Drawings

The subject matter regarded as the invention is particularly pointed out and distinctly claimed in the concluding portion of the specification. The invention, however, both as to organization and method of operation, together with features, objects, and advantages thereof may be further understood by reference to the remaining portions of the specification and the accompanying drawings in which:

Figure 1 is a diagram that illustrates the various components of a surplus assets exchange system, according to one embodiment of the invention;

Figure 2 is a flowchart that illustrates the steps that are performed by a first-come-first-served sales module, according to one embodiment of the invention;

Figure 3 is a flowchart that illustrates the steps that are performed by a standard auction sales module, according to one embodiment of the invention;

Figure 4 is a flowchart that illustrates the steps that are performed by a highest-sealed-bid sales module, according to one embodiment of the invention;

Figure 5 is a flowchart that illustrates the steps that are performed by a buyer's automatic rebidding module, according to one embodiment of the invention;

Figure 6 is a flowchart that illustrates the steps that are performed by a seller's automatic re-posting module, according to one embodiment of the invention;

Figures 7(a) and (b) are interfaces that may be employed to post a listing for an item to be sold, according to one embodiment of the invention;

Figure 8 is a diagram that illustrates a click-through banner, as employed in one embodiment of the invention; and

Figure 9 are interfaces that may be employed to arrange additional service features, according to one embodiment of the invention.

Description Of Specific Embodiments

As will be discussed further below, the system and method of the present

invention may be employed to facilitate the exchange of services and products of any type. However, the system and method are particularly well-suited to provide an exchange for the sale and purchase of surplus assets, and it is this particular model which will be used herein to demonstrate the features of the invention. It is noted, however, that the present invention is not intended to be limited in scope by the embodiments described herein, but can also be employed in many other ways. Some of these ways are discussed in more detail below.

I. SYSTEM COMPONENTS

Figure 1 is a diagram that illustrates the various components of surplus asset exchange system 100. Surplus asset exchange system 100 may be employed by users 10a, 10b and 10c, each of which is connected to surplus asset exchange system 100 via Internet 15. Users 10a, 10b and 10c are sellers seeking to sell surplus assets via the exchange, are buyers seeking to purchase surplus assets via the exchange, or are any combination of sellers and buyers for surplus assets. Internet 15 is coupled to surplus asset exchange system 100 via processor 50, which comprises viewer display interface 64 and web server 62. Viewer display interface 64 provides the display interfaces which are displayed to each user. Processor 50 is coupled to database 30, which comprises various data storage modules which are described in more detail below.

Web server 62 is coupled to system controller 60. System controller 60 is coupled to various data process modules and is configured to control the various

functions that operate system 100, as will be described in more detail below. For instance, system controller 60 is coupled to buyer auto-bid module 66, which performs operations corresponding to automatic bidding on behalf of a buyer, as explained below. System controller 60 is coupled to seller auto-repost module 68, which performs operations corresponding to automatic bidding on behalf of a seller, as explained below.

System controller 60 is coupled to anonymous remailer module 72, which performs operations in order to keep the identities of buyers and sellers anonymous to each other, as further explained below. Also, system controller 60 is also coupled to private sales module 74 and to reference detector module 76, the operations of which are explained below. System controller is also coupled to EDI/XML module 88, which is configured to automate purchase and sale transactions on-line, as will be further explained below.

According to one embodiment of the invention, system controller 60 is also coupled to modules corresponding to particular transaction types. For instance, in the embodiment shown, system controller 60 is coupled to First-Come-First-Served (hereinafter referred to as "FCFS") sales module 80, standard auction sales module 82 and Highest-Sealed-Bid (hereinafter referred to as "HSB") sales module 84. FCFS sales module 80 corresponds to a first-come-first-served transaction type and provides a workflow wherein merchandise is sold to the first buyer that meets a seller's selling criteria. Standard auction sales module 82 corresponds to a standard auction

transaction type and provides a workflow wherein merchandise is sold to the buyer that has made the highest bid at the close of an open auction. HSB sales module 84 corresponds to a highest-sealed-bid transaction type and provides a workflow wherein merchandise is sold to the buyer that has made the highest bid in a sealed bid auction. Each of these transaction types will be discussed more fully below, although the invention is not limited in scope to these transaction types.

FCFS sales module 80, standard auction sales module 82 and HSB sales module 84 are each coupled to Rebalancer module 86. Rebalancer module 86 is configured to receive as inputs bid data from buyers, and to output, from the bid data received, the winning price and the winning quantity. In a preferred embodiment, for each of the transaction types, the bid data which is received by rebalancer module 86 comprises: a minimum price, a maximum price, a minimum quantity and a maximum quantity. Thus, in the preferred embodiment, regardless of the type of transaction selected by a seller, rebalancer module 86 employs the same data and the same process to determine winning price and a winning quantity.

It is noted that all four items of bid data which are received by rebalancer module 86 are not necessarily entered by a buyer making a bid. Instead, several of the four items of bid data may be predetermined depending on the type of transaction selected by the seller. For instance, if a seller selects to employ the standard auction module, a buyer may specify a price range between a minimum and a maximum, while if a seller selects to employ the FCFS module, a buyer only specifies a single

price (i.e.- FCFS sales module 80 operates such that the minimum and maximum price inputs received by rebalancer module 86 are equal to each other). Similarly, depending on whether the seller has listed a single item for sale or multiple items, a buyer may specify a quantity range between a minimum and a maximum quantity, or a single quantity (i.e.- wherein the minimum and maximum quantity inputs received by the rebalancer are both equal to one), as will be explained further below. In addition, rebalancer module 86 is coupled to multi-item optimizer 70, which controls how bids for multiple items are processed by the system.

Additionally, system controller 60 is configured, according to one embodiment of the invention, to employ "flags" that signal when particular items have a pending winning bid. For instance, once a winning bid is established (the manner in which a winning bid is established is discussed in greater detail below), the item for sale is "flagged" such that other buyers can not bid on the item. Since the sale may be contingent on the buyer having satisfactory credit history, or other qualifying criteria, the item remains on display to other buyers but is not available to be bid upon unless and until the buyer is later deemed unsatisfactory.

As previously mentioned, processor 50 is configured to process data which, in part, is stored in database 30. Database 30 comprises various data storage modules, which are accessed by the various process modules of processor 50. For instance, seller profile data module 32 comprises data corresponding to the seller of a product. Similarly, buyer profile data module 34 comprises data corresponding to potential

buyers of a product. Product data module 36 comprises data corresponding to the product being sold. Private sales group data module 38 comprises data corresponding to private sales groups, a feature which is discussed below.

II. GENERAL OVERVIEW OF HOW THE SYSTEM OPERATES

The present invention employs a processor that maintains an addressable web site which is accessible by users via the Internet. Sellers seeking to sell surplus assets register on the website by providing seller data which is stored in seller profile data module 32 in database 30. The sellers list the items that they desire to sell on the website either as individual listings or as multiple listings. The seller can specify a type of transaction to sell the items - for instance, on a first-come-first-served basis, in accordance with a standard auction, by a highest-sealed-bid process, or by any other type of transaction available to the seller via system 100. Data corresponding to the listed items are stored in product data module 36 in database 30.

Buyers looking to purchase surplus assets may browse the listings (provided the listing has not been specified by the seller as a private sale, which is discussed in detail below). If the buyer desires to enter a bid or purchase a listed item, the buyer also registers on the website by providing buyer data which is stored in buyer profile data module 34 in database 30. The buyer may bid on items either individually or, if a multiple listings, on more than one item.

III. HOW A LISTING IS POSTED

Figures 7(a) and 7(b) illustrate interfaces which are employed in order for a seller to enter data corresponding to an item to be sold. The interfaces which are shown in Figures 7(a) and 7(b) have fields which prompt a seller to enter pertinent data. For instance, referring to interface 700 shown in Figure 7(a), a seller enters the location of the item to be sold in location field 705. In quantity field 710, the seller enters the quantity of items to be sold (e.g.- one item, more than one identical item, etc.). In sale type field 715, the seller selects the transaction type to be employed to sell the item (e.g.- first come first serve, standard auction or highest sealed bid, each of which is described below).

Referring to interface 720 shown in Figure 7(b), a seller enters a description of the item to be sold in field 725. In field 730, the seller enters search words that are useful to be employed by a buyer seeking to locate the item. In field 735, the seller's identity is entered, although the seller can select to be anonymous to buyers, as is explained below in connection with the anonymous remailer module 72. In field 740, the seller enters the sales group that will be able to view and bid on the item. The seller can use the field to specify "all customers", or else to specify a private sales group, as is explained below in connection with private sales module 74. In addition, field 740 displays the fee and commission for listing the item for sale.

In field 745, the seller indicates whether the item is new or used. In field 750, the seller specifies which methods of payment are acceptable. For in stance, the seller can select from the options "business check", "cash", "certified check", or other

suitable methods. In field 755, the seller indicates the timing of payment, such as "on delivery", "on inspection", or such other timing made available to the seller. In field 760, the seller provides shipping terms. Other fields, such as the weight of the item, additional selling requirements, unit definition, are also employed, although are not discussed in detail here.

In field 765, the seller provides an asking price of the item, and in field 770, the seller specifies a minimum acceptable bid price. As will be explained below, these prices are employed by the various modules of system 100 to determine which bid is the winning bid. Field 755 enables the seller to select whether to make the asking price visible to bidders. In field 780, the seller designates a sale end date and time. Depending on the transaction type which is selected by the seller, the sale end date is the date on which the bidding for the item is closed, or is the date on which sealed bids are opened for comparison.

Field 785 provides a seller with the option to receive e-mail messages at various intervals during the sale. For instance, the seller can select to receive an e-mail message every time there is a new bid, every business day, once a week, or when the sale closes, although the present invention is not intended to be limited to these particular options. Finally, field 790 is employed by the seller to select an automatic re-posting feature, which is explained below, but generally enables the seller to have the price of a listed item automatically lowered if bids are not received meeting certain minimum criteria specified by the seller.

Of course, these are merely some of the fields which may be used by the present invention, which contemplates the entering by a seller of any type of data which a seller may deems pertinent to potential buyers. The information which is entered by the seller via interfaces 700 and 720 is employed by various modules of processor 50 in order to perform the functions of the present invention. The operation of some of these modules is explained hereafter.

IV. OPERATION OF THE FCFS MODULE:

Figure 2 is a flowchart that illustrates the steps which are performed by the system of the present invention in accordance with one embodiment. Specifically, Figure 2 illustrates the steps which are performed by FCFS Sales Module 80 when a seller selects the first-come-first-served transaction type. At step 200, the seller logs onto the addressable website for the purpose of listing an item desired to be sold. It is recognized that the item that is desired to be sold may be a single item or may be more than one item, but for the purpose of simplicity, a single item is assumed in the following. Additional steps performed when multiple items are being sold are discussed in connection with Multi-item Optimizer 70.

At step 205, the seller lists the item for sale by including a description of the item, technical data or specifications, or any other information which the seller deems pertinent to a buyer that is interested in purchasing it. An example of an interface which may be employed in order for a seller to enter data corresponding to an item to be sold is shown in Figures 7(a) and 7(b), which were explained previously. At step

210, the seller selects the first-come-first-served transaction type by, for example, clicking on a link on the website. At step 215, the seller specifies the selling criteria. The selling criteria are the requirements that must be met by the buyer in order for the seller to agree to the sale. For instance, the seller can specify a minimum selling price below which the seller will not agree to the sale as one selling criteria for the item. Other selling criteria specified by the seller include, without limitation, a shipping fee, insurance requirements, and the like.

At step 220, a buyer logs on the website and arrives at the listing which was entered by the seller at step 205. The buyer may arrive at the listing any number of ways, including, without limitation, by performing a search of the listing for a specific item or by specifically designating the listing. If the buyer desires to purchase the item listed by the seller, the buyer enters offer terms on which the buyer desires to purchase the item, such as a maximum price which the buyer is willing to pay. At step 230, the offer terms are received by rebalancer module 86.

At step 235, rebalancer module 86 determines whether the offer terms are not less than the selling criteria entered by the seller at step 215. If the offer terms are not less than the selling criteria, then the system proceeds to step 240, whereat the buyer is informed that the offer terms are accepted. The buyer may be informed of the acceptance of the offer terms by any of various means, although according to the preferred embodiment, an e-mail is generated by the system and is sent to an e-mail address corresponding to the buyer. In addition, at step 240, the seller is also

informed of the acceptance of an offer terms, preferably by an e-mail which is generated by the system and is sent to an e-mail address corresponding to the seller. The offer terms provided by the buyer can include, without limitation, the buyer's offer price for the item.

If the offer terms are less than the selling criteria, then the system proceeds to step 250, whereat the buyer is informed that the offer terms are not accepted. The buyer may be informed that the offer terms are not accepted by any conceivable means, although according to the preferred embodiment, an e-mail is generated by the system and is sent to the e-mail address corresponding to the buyer, as described in step 240 above.

At step 255, the system determines whether the buyer desires to make a different offer. If so, the system returns to step 225 for the buyer to make another offer. If not, the system returns to step 220, where another buyer may log onto the website and offer to purchase the item. Of course, it is recognized that a buyer need not wait to log on until a previous buyer has logged off. Instead, in a preferred embodiment, many buyers are logged onto the system simultaneously, and the system simply accepts the first offer that meets the seller's criteria. It is also recognized that, according to one embodiment, a seller may elect to reduce his or her selling criteria (e.g.- such as by lowering the minimum acceptable bid price), in which case rebalancer module 86 would be employed to reconsider all previous bids to determine whether any of them meet the seller's new selling criteria.

V. OPERATION OF STANDARD AUCTION MODULE

Figure 3 is a flowchart that illustrates the steps which are performed by the system of the present invention in accordance with another embodiment. Specifically, Figure 3 illustrates the steps which are performed by Standard Auction Sales Module 82 when a seller selects the standard auction transaction type. At step 300, the seller logs onto the addressable website for the purpose of listing an item desired to be sold. Again, it is recognized that the item that is desired to be sold can be a single item or may be more than one item, but for the purpose of simplicity, a single item is assumed for the following description.

At step 305, the seller lists the item for sale by including a description of the item, technical data or specifications, or any other information which the seller deems pertinent to a seller. At step 310, the seller selects the standard auction transaction type by , for example, clicking on a corresponding link on the website. At step 315, the seller lists the minimum acceptable bid and the date on which the auction is to close. In addition, the seller can select a minimum shipping quantity, a total quantity of items available and a minimum opening offer.

At step 320, a buyer logs on the website and arrives at the listing which was entered by the seller at step 305. Again, the buyer may arrive at the listing any number of ways, including, without limitation, by performing a search or by specifically designating the listing. If the buyer desires to purchase the item listed by the seller, the buyer enters a bid. At step 330, the bid is received by rebalancer

module 86.

At step 335, rebalancer module 86 reconsiders all of the bids and determines whether the current bid is not only greater than the minimum acceptable bid specified by the seller at step 315, but also greater than the highest maximum bid received from another buyer. The highest maximum bid received from another buyer is not necessarily the current highest bid, but is the current highest bidder's maximum bid. For the first bid received by the system on a specific item, the system determines whether the bid entered by the current user is greater than the minimum acceptable bid entered by the seller in step 315, since no previous bids have been received. Thus, the system only considers the highest maximum bid of another buyer after a first buyer has entered his or her bid or maximum bid.

If the system determines at step 335 that the offer price is not greater than both the last highest bid and the minimum acceptable bid, then the system proceeds to step 340, where the buyer is informed that the offer price is not acceptable. In the standard auction module, system controller 60 is configured to display to users the current highest bid. Thus, when an unacceptable bid is entered by a buyer, the buyer is advantageously informed of the rejection of his/her bid by a message which is promptly displayed to the user.

At step 355, the system determines whether the buyer desires to increase his/her bid. If so, the system returns to step 325 for the buyer to make another bid. If

not, the system returns to step 320, where another buyer may log onto the website and enter a bid to purchase the item. Of course, as stated above, it is recognized that a buyer need not wait to log on until a previous buyer has logged off. Instead, in a preferred embodiment, many buyers are logged onto the system simultaneously, and the system simply accepts all bids that are higher than both the minimum acceptable bid and the highest bid previously received.

If the system determines at step 335 that the current bid received is greater than the highest bid previously received and the minimum acceptable bid, then the system proceeds to step 350. At step 350, the buyer is informed that the offer price is the current highest bid. Because the system is configured, according to a preferred embodiment, to continuously display to users the current highest bid, the buyer is advantageously informed that she has the current highest bid by a message which is promptly displayed to the user. In addition, the seller may be informed by an e-mail message that the highest current bid has been increased, although the seller may preselect to be informed of current bid prices at various intervals, as is explained in greater detail below. In a preferred embodiment, however, the seller can view the same display generated by the system for buyers and view the current highest bid as new buyers enter consecutively higher bids.

At step 355, the system determines whether the auction has been closed. Specifically, the system determines whether the closing date and time which was specified by the buyer at step 315 has elapsed. If not, then the system returns to step

320, where other buyers may log onto the website and enter bids for the item. If the auction has closed, then the buyer that entered the last current highest bid is notified that her bid has been accepted and the sale is consummated. According to one embodiment, the buyer may be informed by an e-mail message that her last bid is the highest and has been accepted. The seller may also be informed by an e-mail message what the highest bid is upon the close of the auction.

VI. OPERATION OF HIGHEST-SEALED-BID MODULE

Figure 4 is a flowchart that illustrates the steps which are performed by the system of the present invention in accordance with another embodiment. Specifically, Figure 4 illustrates the steps which are performed by HSB Sales Module 84 when a seller selects the highest-sealed-bid transaction type. At step 400, the seller logs onto the addressable website for the purpose of listing an item desired to be sold. Again, it is recognized that the item that is desired to be sold may be a single item or may be more than one item, but for the purpose of simplicity, a single item is assumed for purposes of the following description.

At step 405, the seller lists the item for sale by including a description of the item, technical data or specifications, or any other information which the seller deems pertinent to a seller. At step 410, the seller selects the highest-sealed-bid transaction type by, for example, clicking on a corresponding link on the website. At step 415, the seller specifies the minimum acceptable bid and the date and/or time at which the bids are to be opened.

At step 420, a buyer logs on the website and arrives at the listing which was entered by the seller at step 405. Again, the buyer may arrive at the listing any number of ways, including without limitation, by performing a search or by specifically designating the listing. If the buyer desires to purchase the item listed by the seller, the buyer enters a bid at step 425. At step 430, rebalancer module 86 determines from the bids that have been received which is the currently winning bid.

At step 435, the system determines whether the bidding process is closed. Specifically, the system determines whether the closing date and/or time which was specified by the seller at step 415 has elapsed. If not, then the system returns to step 420, where other buyers may log onto the website and enter bids for the item. Because this transaction type is a sealed bid, the bids which are entered by each buyer are not displayed to the other buyers, and subsequent buyers submit a bid without knowing whether the current bid exceeds the highest bid previously received by the system. It is note, however, that in accordance with one embodiment of the invention, the bids that are entered by each buyer are visible to the seller, thus enabling the seller to lower the minimum acceptable bid if desirable. If the bidding process is closed, then the system proceeds to step 440.

At step 440, at the closing date and/or time which was specified by the seller at step 415, rebalancer 86 provides system controller 60 with the winning bid as determined at step 430 in the last iteration. At step 445, according to one embodiment, the buyer having the highest bid is informed by an e-mail message that

her bid is the highest and has been accepted. The seller is also informed by an e-mail message what the highest bid is upon the closing date and time specified by the seller.

VII. OPERATION OF BUYER AUTO-BID MODULE

Buyer Autobid Module 66 is employed to automatically increase the bid of a first buyer when a second buyer enters a bid which is higher than the original bid entered by the first buyer. Figure 5 is a flowchart that illustrates the steps which are performed by Buyer Autobid Module 66, in accordance with one embodiment of the present invention. In a preferred embodiment, the automatic rebidding feature for buyers is activated by the buyer when she enters a bid for a particular item. Specifically, a facility is provided to enable the buyer, upon entering a bid, to activate the rebidding feature. The facility can include, by way of example and without limitation, a link, a command, a selectable switch, or the like. Buyer Autobid Module 66 is then activated when a subsequent buyer enters a bid which is higher than the first bid made, as explained below.

For the purposes of example below, it is assumed that Buyer Autobid Module 66 is typically employed when a seller has selected a standard auction transaction type in order to sell an item of merchandise. However, Buyer Autobid Module 66 may also be employed when the FCFS transaction type is selected by the seller. An example of how Buyer Autobid Module 66 may be employed when the FCFS transaction type is selected is briefly discussed below.

Referring to Figure 5, at step 500, a first buyer enters a bid for a particular item that is being sold in a standard auction. The bid is assumed to be higher than bids which have previously been received, and is therefore the current highest bid. At step 505, the first buyer selects the automatic rebidding feature by, for example, clicking on a link provided by the system on the bidding page.

At step 510, the first buyer enters corresponding automatic rebidding data. For instance, according to one embodiment of the invention, Buyer Autobid Module 66 is configured to enable the first buyer to specify a "maximum bid". The "maximum bid" is the highest bid that the first buyer is willing to make assuming that her original bid has been exceeded by another buyer.

At step 515, a second buyer enters a bid for the same item. This bid may include a first bid amount that exceeds the first buyer's current bid, and a maximum bid amount that the second buyer is willing to pay for the item. Ordinarily, because the second buyer's opening offer exceeds the first buyer's current bid, the bid of the second buyer would become the current highest bid. However, because the first buyer selected the Buyer Autobid feature, the system proceeds to step 520.

At step 520, the system determines whether the maximum bid entered by the second buyer is greater than the maximum bid entered by the first buyer at step 510. If so, the system proceeds to step 545, which is explained in detail below. If the maximum bid entered by the second buyer is not greater than the maximum bid

entered by the first buyer, the system proceeds to step 525. At step 525, the system increases the bid of the first buyer to an amount equal to the second buyer's maximum bid plus a bid increment. The bid increment is, according to one embodiment of the invention, a predetermined amount by which a bid must exceed a previously received bid. For instance, system 100 may be configured such that a predetermined bid increment of, for example, $1.00 is added to a bid under $10.00, while a predetermined bid increment of $10.00 is added to any bids over $100.00. Alternatively, the bid increment may be selected by the buyer.

The system then proceeds to step 535. At step 535, the system sets the new current highest bid. At step 540, the system informs the first buyer that her bid has been increased and that she is still the current highest bidder, by for example, sending the first buyer an e-mail message to that effect. In addition, according to one embodiment, the seller is informed of the new highest bid price by e-mail. Alternatively, the seller may elect when entering the item for sale (or at any other convenient time) to be informed at regular time intervals only, or upon the close of the auction. After step 540, the system proceeds to step 550, which is explained below.

Referring back to step 520, if the maximum bid entered by the second buyer is greater than the maximum bid entered by the first buyer at step 510, then steps 525 through 540 are not performed. Instead, the system proceeds to step 545, at which the second buyer is informed that his or her bid is the current highest bid, by, for example, promptly displaying such information to the second buyer. The current highest bid is

equal to the first buyer's maximum bid price plus a predetermined increment, as previously explained.

After step 545 (and after step 540 as previously explained), the system proceeds to step 550. At step 550, the system determines whether the auction has been closed. Specifically, the system determines whether the closing date and time which was specified by the seller (such as step 315 of the flowchart shown in Figure 3) has elapsed. If not, then the system returns to step 515, where other buyers may log onto the website and enter bids for the item. If the auction has closed, then the buyer that entered the last current highest bid is notified that her bid has been accepted and the sale is consummated. According to one embodiment, the winning buyer and the seller are informed by an e-mail message.

While the above-discussed flowchart illustrates how Buyer Autobid Module 66 is employed when a seller has selected a standard auction transaction type, Buyer Autobid Module 66 may also be employed, according to one embodiment of the invention, when the FCFS transaction type is selected by the seller. For instance, according to one embodiment, a seller may, upon selecting a FCFS transaction type, also select whether to make the minimum acceptable bid price visible to buyers or not. If the seller selects to make the minimum acceptable bid price visible to buyers, then buyers will typically enter a bid only if it is equal to the minimum acceptable bid price.

If the seller selects not to make the minimum acceptable bid visible to buyers, then buyers will not know if the bids they are entering are equal to the minimum acceptable bid. In order to avoid placing a bid which is significantly higher than the minimum acceptable bid, a buyer may opt to employ Buyer Autobid Module 66. In this case, the buyer enters a low bid (e.g.- a bid which the buyer believes to be less than the seller's minimum acceptable bid) and uses module 66 in order to periodically increase the bid, provided that no other buyer has subsequently entered a winning bid.

Thus, the buyer slowly increases her bid until the seller's minimum acceptable bid price has been met or exceeded. This method of bidding has the disadvantage that a second bidder may enter a winning bid before the first buyer's bid increases sufficiently to meet the seller's minimum acceptable bid price. However, the method has the advantage that the first buyer does not enter a bid which is significantly higher than the seller's minimum acceptable bid price. In addition, since the buyer's bid increases periodically, it enables a buyer to obtain a lower price in the event that the seller reduces her minimum acceptable bid price prior to the buyer meeting it.

VIII. OPERATION OF SELLER AUTO-REPOST MODULE

Seller Auto-repost Module 68 is employed to automatically decrease the seller's minimum acceptable bid entered by a seller when, at the close of a bid or at another time specified by the seller, there are no bids that have been entered by buyers which equal or exceed the minimum acceptable bid. Figure 6 is a flowchart that illustrates the steps which are performed by Seller Auto-repost Module 66, in

accordance with one embodiment of the present invention. In a preferred embodiment, the automatic reposting feature for sellers is activated by the seller when she lists an item for sale. Specifically, a facility is provided to enable the seller upon listing an item for sale to activate the reposting feature. The facility can include, by way of example and without limitation, a link, a command, a selectable switch, or the like. Seller Auto-repost Module 66 is then activated when the seller minimum acceptable bid is not met, as explained below.

It is also noted that, unlike the Buyer Autobid module 66, which is typically employed when a seller has selected a standard auction or first-come-first-served transaction type, Seller Auto-repost Module 68 may also be employed in the standard auction, first-come-first-served and highest-sealed-bid transaction types. Thus, as will be explained below, the seller auto-repost module enables items which have not received a bid equal to or greater than the minimum acceptable bid to remain automatically on the site. By keeping the items on the site longer, there is an increased likelihood that it will be sold via the website, and a decreased likelihood that the seller will remove the item from sale and instead attempt to sell it via another means. Thus, for the purposes of example below, a standard auction transaction type is assumed.

Referring to Figure 6, at step 600, a seller enters a minimum acceptable bid for a particular item. The entering of this minimum acceptable bid may correspond to the performance of steps 215, 315 and 415 in the flowcharts of Figures 2, 3 or 4, respectively. At step 605, the seller selects the automatic reposting feature by, for

example, clicking on a link provided by the system on the listing page.

At step 610, the seller enters corresponding automatic rebidding data. For instance, according to one embodiment of the invention, Seller Auto-repost Module 68 is configured to enable the seller to specify a decreased minimum acceptable bid.

In another embodiment, the Seller Auto-repost Module 68 is configured to enable the seller to specify a "decrease amount" and a "lowest minimum acceptable bid". In this embodiment, the minimum acceptable bid may be lowered more than one time. The "decrease amount" is the amount by which the seller desires to incrementally decrease her original bid, while the "lowest minimum acceptable bid" is the lowest bid that the seller is willing to accept in the event that her original minimum acceptable bid has not been met. In still another embodiment, the decrement employed is automatic rather than selected by the user. For instance, in a preferred embodiment, the bid is reduced by 10% from the original minimum acceptable bid price or else is equal to 105% of the highest bid previously received, whichever is highest.

At step 615, the system determines that the auction is closed. Specifically, the system determines that the closing date and time which was specified by the buyer (such as step 315 of the flowchart shown in Figure 3) has elapsed.

At step 620, the system determines whether any bids have been entered that are greater than the minimum acceptable bid entered by the seller at step 600. If so,

the system proceeds to step 625, where the seller and the buyer are notified, for example, by e-mail messages that a bid has been accepted. If there are no bids that have been entered by a buyer which is equal to or greater than the minimum acceptable bid price entered by the seller at step 600, the system proceeds to step 630, at which the system decreases the minimum acceptable bid previously entered by the seller. In that case, the minimum acceptable bid is lowered incrementally by the decrement or is lowered to the seller's specified lower minimum acceptable bid. Thus, the item for sale is automatically reposted at a lower price. Once the item is reposted, a new bidding period may begin, and interested buyers can enter bids up until a time and date specified by the seller.

At step 635, the system notifies the seller and the buyer, for instance via e-mail messages, that the minimum acceptable bid has been lowered. In addition, according to one embodiment of the invention, the system is configured to also send messages to potential buyers (i.e.- buyers that entered bids that were less than the original minimum acceptable bids, buyers that viewed the listing for the item but did not enter bid, and the like) notifying them that the minimum acceptable bid has been lowered and that they may resubmit bids if desired.

The automatic reposting feature applies to selling criteria such as price, as well as other criteria. For instance, if a seller specifies that a minimum sale quantity for a lot of items to be sold, the automatic reposting feature may also be used to specify a smaller quantity of items to be sold. For instance, if a seller has 10 items to sell and specifies that a buyer must enter a bid for at least six of them, the reposting feature

may be employed to lower the minimum sale quantity to four in the event that no bids are received for six or more items.

In still another embodiment, the automatic reposting feature may also be employed for different quantity-related criteria. For instance, if a seller specifies that a minimum sale quantity for a lot of items to be sold, the automatic reposting feature may also be used to specify a smaller quantity of items when some of the items are sold. For instance, as in the example cited above, a seller may have 10 items to sell and specifies that a buyer must enter a bid for at least six of them. When a bid is entered and accepted for six items, there are four items which remain to be sold. However, because the minimum quantity is six, no further bids can be accepted for the remaining four items. In one embodiment of this invention, the reposting feature is used to lower the minimum sale quantity to less than four so that additional bids may be entered on the remaining items.

The present invention also contemplates the employment of a schedule of decrements which is specified by a seller. According to this embodiment, a seller provides several decreases in the asking price of an item, and further provides a schedule or calendar upon which each decrement will take place.

IX. OPERATION OF MULTI-ITEM OPTIMIZER

Multi-item optimizer 70 is coupled to rebalancer module 86 and to system controller 60. Optimizer 70 is employed to optimize the calculations of the rebalancer in connection with bids for multiple item listings. A multiple item listing is a listing

for more than one item in which the seller has agreed to sell less than all of the items in a single transaction. For instance, a seller will list ten items to be sold and is willing to accept bids for (and to therefore sell) no less than six of the items in a single transaction. That is, the seller will accept bids from buyers for any number of items between six and ten. The multi-item optimizer is employed to establish a criteria by which to ascertain which certain of such bids are considered over others.

For instance, in a preferred embodiment of the invention, multi-item optimizer 70 may be configured to optimize the calculation of winning bids based on the total price of a bid, the per unit price of a bid, or by the quantity of items in the bid. However, the present invention is not intended to be limited in this respect but instead contemplates the employment of any such optimization criteria. Advantageously, the seller may enter via system controller 60 the desired optimization criteria, which is then communicated to rebalancer module 86. Rebalancer module 86 then employs the selected optimization criteria to calculate the winning bid for a sale item.

To illustrate the operation of the multi-item optimizer, the example discussed above may be used. For instance, a seller may list ten items to be sold and is willing to accept a bid for (and to therefore sell) no less than six of the items in a single transaction. A first bidder enters a bid for six items at $200.00 each (or a total sale of $1,200.00), while a second bidder enters a bid for all ten items at $150.00 each (for a total sale of $1,500.00), and a third bidder enters a bid for nine items at $175.00 each (for a total sale of $1,575.00). The winning bid will depend on the optimization criteria is selected by the seller. When the seller selects an optimization criteria that

determines the winning bid according to the total bid price, then the third bidder wins because the total sale price is greatest.

When, on the other hand, the seller selects an optimization criteria which determines the winning bid according to the unit price per item, then the first bidder wins because the unit price of $200.00 per item is greater than the unit price of $150.00 per item. Furthermore, when this optimization criteria is selected by the seller, the seller is left with four items that remain to be sold. However, the seller will likely elect this optimization criteria when, for instance, she is confident that the remaining items will eventually be sold (advantageously, the automatic reposting feature may be employed here to lower the minimum number of items that may be bid on by a buyer). When, on the other hand, the seller selects an optimization criteria which determines the winning bid according to the quantity of items, then the second bidder wins because the second buyer's bid is for all ten of the available items.

Alternatively, the seller may select an optimization criteria which determines the winning bid according to the quantity of items in the bid. In the above example, the second bidder wins under this criteria because the ten items bid on by the second buyer are greater than the six items bid on by the first buyer. Although the seller may not receive the best unit price for the items using this criteria, this criteria may be the most advantageous when, for instance, the seller needs to dispose of goods as quickly as possible to make space for new inventory.

X. OPERATION OF ANONYMOUS REMAILER MODULE

As previously discussed, system 100 of the present invention, according to one embodiment thereof, employs automatically generated and transmitted e-mail messages to inform buyers and sellers of changes in current highest bid prices, minimum acceptable bids, etc. In addition, according to a preferred embodiment of the present invention, the system also employs an intra-system e-mail messaging feature which enables buyers and sellers to exchange information about an item for sale on a one-on-one basis.

An e-mail messaging system is important for facilitating communication between buyers and sellers. For instance, an e-mail messaging system enables buyers to ask questions about an item for sale and for sellers to provide answers. However, there is also the need to prevent buyers and sellers from using an e-mail messaging system to defraud the auction website. For instance, buyers and sellers may use an e-mail messaging system for the purposes of arranging off-site transactions. Once a buyer sees an item listed by a seller, the buyer may send the seller an e-mail message offering to purchase the listed item off-site, seeking to avoid the auction website commission. In addition, buyers and sellers may prefer to transact anonymously (e.g.- to prevent their usual buyers from knowing that they are selling by other means, or to prevent a competitor from knowing what items you are seeking to sell). Thus, in a preferred embodiment, the system also employs anonymous remailer module 72 to exchange e-mail messages between parties.

Generally, anonymous remailer module 72 facilitates the exchange of e-mail messages and operates to alter the e-mail addresses of the buyers and sellers that are

exchanging the e-mail messages. In this manner, anonymous remailer module 72 prevents a buyer from using the auction website to obtain an e-mail address of a seller and then sending the seller an e-mail message off-site to conduct an off-site transaction. An example of how anonymous remailer module 72 works is described below.

When a seller generates a listing for an item to be sold, system controller 60 preferably prompts the seller to provide a seller e-mail address in the event that a buyer has questions about the listing. Preferably, this is done during a registration process which the seller is required to perform in order to be permitted to use the website. Once the seller provides her actual e-mail address, anonymous remailer module 72 assigns an altered seller e-mail address that corresponds to the seller's actual e-mail address. The altered seller e-mail address is then stored in memory in anonymous remailer module 72 along with its corresponding actual seller e-mail address. The altered seller e-mail address is then provided on the listing as a hypertext link on the bidding webpage.

After the item is listed, a buyer having questions about the item may wish to send an e-mail message to the seller. The buyer preferably clicks on the hypertext link on the bidding webpage, and is provided fields suitable for entering a message to be sent. In addition, the buyer is provided with a field for entering her own actual e-mail address, so that the seller will be able to respond to the buyer. When the buyer enters her actual e-mail address, anonymous remailer module 72 alters the actual e-mail address, such as by encrypting it.

The altered buyer e-mail address is then stored in memory in anonymous remailer module 72 along with its corresponding actual buyer e-mail address. The e-mail message, when sent to the seller, will provide the buyer's altered e-mail address, and anonymous remailer module 72 will forward the e-mail message to the seller with the altered buyer e-mail address therein. Thus, in a preferred embodiment of the invention, anonymous remailer module 72 stores actual buyer and seller e-mail addresses and their corresponding altered e-mail addresses, thereby providing anonymity between the sellers and buyers.

Another feature which is advantageously provided by the e-mail system of the present invention is surveillance of e-mail messages which are exchanged between sellers and buyers. Although anonymous remailer module 72 may be employed to prevent buyers and sellers from ascertaining each others identity and then conducting business off-site, it does not prevent a buyer and seller from providing to each other contact information in an e-mail message. Preferably, buyers and sellers are informed that their e-mail messages may be monitored by the website operators. Furthermore, the system of the present invention is configured so that the operator of the surplus asset exchange system can monitor e-mail messages between seller and buyers, such as by copying the messages to a website operator e-mail address.

For instance, although a buyer's actual e-mail address has been altered by anonymous remailer module 72, the buyer can still send to the seller an e-mail message providing the seller with the buyer's actual e-mail address, telephone number or other contact information. Although the buyer may provide the seller with this

information (or vice versa) for a legitimate purpose (e.g.- the seller provides the buyer with her street address to set up an inspection), it may also be for the purpose of setting up an off-site transaction in order to avoid auction fees which are due. By monitoring the e-mail messages between the seller and buyers, the site operators may contact those parties that attempt to conduct the transaction off-site and compel them to pay any commissions that are due.

XI. OPERATION OF THE PRIVATE SALES MODULE

Just as there are instances where a buyer and a seller might wish to remain anonymous to each other, there are also instances when a seller does not wish to sell an item to a particular buyer or groups of buyers. As described above, this may be the case when a seller does not wish to sell outside of an established sales channel, or does not wish to sell to a direct competitor. Similarly, there may also be instances when a seller desires to sell an item only to a particular group of persons. This may be the case when a seller wishes to sell an item only to members of a private sales group (e.g.- a membership which entitles members to special discounts), to persons or organizations within the same company as the seller, to certain preferred customers of the seller, and the like. In either of these cases, the present invention, according to one embodiment, employs private sales module 74 to limit the buyers to which a listing is offered.

According to one embodiment, when a seller generates a listing for an item to be sold, private sales module 74 is employed to prompt the seller to identify a sales group. The sales group is a group of buyers that the seller desires to view, and/or be

eligible to bid on, the listed item.

According to one embodiment of the invention, private sales module 74 provides, for example, a pull-down menu of sales groups. The pull-down menu is provided to the seller on the webpage which the seller lists the item to be sold. Advantageously, the pull-down menu which is available to be used by the seller is also customizable by the seller. In other words, once a private sales group has been created by a seller, the seller need only click-on the appropriate sales group in the pull-down menu to limit the eligibility of bidding to persons in that sales group. Advantageously, a default setting is provided for "all buyers". Thus, unless the seller designates a private sales group, the listing is available to all potential buyers.

Generally, data corresponding to the private sales groups is stored in private sales group data module 38 in database 30. A seller, such as the owner of a discount membership group, provides the data which is stored in private sales group data module 38. This data may include the names or account numbers of members of the group, password data corresponding to the members in the group, and other data that uniquely corresponds to the private sales group. As stated above, once the private sales group is created, the seller may add the private sales group to her customized pull-down menu of private sales groups.

According to one embodiment of the invention, the listings which are designated by a seller as limited to a specific group of buyers are not able to be viewed by buyers that are not members of that specific sales group. According to

another embodiment of the invention, the listings which are designated by a seller as limited to a specific group of buyers are able to be viewed by buyers that are not members of the private sales group, but buyers that are not members of the private sales group are not eligible to bid on the listed item. Preferably, buyers that locate private sale items are required to demonstrate their eligibility to view or bid on the private sale items by entering an account number, password, or another predetermined means of identification. Upon receipt of the account number or password, private sales module 74 communicates with private sales group data module 38 in database 30 in order to determine whether the account number or password is valid. If so, the buyer is permitted to view or bid on the private sale item.

According to another embodiment of the invention, buyers who are members of a private sales group are, upon logging on to the site, directed to an area of the system not available to non-members. These members can then view and bid on listings not offered to buyers who are not members of the private sales group.

XII. OPERATION OF THE REFERENCE CODE DETECTOR MODULE

Although one method for implementing a private sales group feature is to require members of the private sales group to enter an account number or a password when they visit this business exchange website, the present invention, according to one embodiment thereof, also enables a buyer to be pre-qualified. For instance, if a member of a discount membership club is using the website of the discount membership club, the member may be prequalified to view and bid on listings that the discount membership club has posted on the business exchange website of the present

invention.

For instance, one method for bypassing the entering of passwords or account numbers is by the employment of click-through banners, having predetermined URL links, on the website of the discount membership club. Figure 8 illustrates web interface 800 which employs click-through banner 805 for this purpose. In this embodiment, the discount membership club has a website of its own which is used by its members. The discount membership club may post listings of items for sale on the business exchange website with the desire that its members view and bid on the items. In order for the members to access the listing, the discount membership club website employs a click-through banner, comprising a hypertext link to the business exchange website.

Advantageously, the click-through banner of the discount membership club website also comprises a reference code which is received by reference code detector module 76 of processor 50. Reference code detector module 76 is configured to store various reference codes corresponding to different private sales group websites. Upon the receipt of a reference code, reference code detector module 76 is configured to identify the private sales group which the person has clicked-through from. Reference code detector module 76 then accesses the private sales group data module 38 of database 30, enabling the user to view and bid for listing available to the private sale group. This is performed without requiring the user to qualify for the private sales group by entering an account number or password.

In addition, the reference code detector module 76 may be employed to generate customized interfaces for persons that click-through from a banner on another website. For instance, upon the receipt and detection of a reference code, reference code detector module 76 may be configured, according to one embodiment of the invention, to generate an interface to the user having the corporate logo of both the private sales group and the business exchange website thereon. The process of "co-branding" the interface helps to establish in the mind of the user a correlation between the two entities, enabling the goodwill of one to positively influence the user's perception of the other. Thus, although a user may not recognize the brand of the business exchange website, the presence of the brand of the private sales group reassures the user of the legitimacy of the items being sold.

According to another embodiment of the present invention, a reference number is assigned to the private sales group. Reference code detector module 76 is configured to determine the reference code that corresponds to a member of the private sales group who has access to the system by, for example, matching the user's e-mail address, Internet protocol address or the like, with certain pre-defined criteria stored in the reference code detector 76.

As noted previously, system controller 60 is also coupled to XML/EDI module 88. XML/EDI refers to a standard for conducting commerce electronically over the Internet.. By employing this standard, buyers and sellers are able to conduct an entire transaction, including but not limited to exchanging purchase orders, sales invoices, insurance documents, shipping documents, payments and the like on-line.

Figure 9 is an interface that may be employed to arrange additional service features, according to one embodiment of the invention. For instance, interface 900 as shown enables a user to click-through to various additional services, although the present invention is not intended to be limited in scope to the services shown herein. For instance, interface 900 has link 905, which connects a user to logistics services such as shipping and transportation. Link 910 connects a user to escrow services, while link 915 connects a user to credit rating services. Link 920 connects a user to insurance services, while links 925 and 930 connect a user to inspection services and regulatory fulfillment services, respectively. Regulatory fulfillment services may include, but are not limited to, import regulations, export regulations and the like.

The present invention may also employ a feature referred to as "Make an Offer". According to this embodiment, the user contacts the operator of the asset exchange system and requests to communicate directly with the seller. The operator then refers contact information of the buyer, such as e-mail address, telephone number and the like, to the seller. In this way, a buyer and seller may obtain additional information regarding the transaction and terms. During this period, the system sets a customer inquiry flag indicating that the items offered by the seller are subject to an offer and can not be bid on by others temporarily.

While only certain features of the invention have been illustrated and described herein, many modifications, substitutions, changes or equivalents will now occur to those skilled in the art. It is therefore, to be understood that the appended

claims are intended to cover all such modifications and changes that fall within the true spirit of the invention.

We claim:

1. An asset exchange system for facilitating a sale of items, said system comprising:

a processor for maintaining an addressable website and for controlling access to said website via Internet by at least one buyer and a seller;

a plurality of sales modules coupled to said processor, each of said sales modules configured to process said sale of one or more of said items as specified by said seller; and

a multi-item optimizer coupled to said processor and configured to define a sales criteria for accepting winning bids from said buyers for a multiple item listing.

2. The system according to claim 1, wherein said system is further configured to post, upon receipt from said seller, data corresponding to said one or more of said items and to display to said at least one buyer said data corresponding to said one or more of said items, said processor further configured to query said seller for a preferred transaction type.

3. The system according to claim 2, wherein said transaction type comprises a first-come-first-served transaction type, wherein said seller provides a minimum acceptable bid and said item is sold to a first buyer that enters a bid equal to said minimum acceptable bid.

4. The system according to claim 2, wherein said transaction type comprises a standard auction transaction type, wherein said seller provides a

minimum acceptable bid and an auction closing time and a plurality of buyers enter successively larger bids, and wherein said item is sold to a buyer having the highest bid at said auction closing time.

5. The system according to claim 2, wherein said transaction type comprises a highest-sealed-bid transaction type, wherein said seller provides a minimum acceptable bid and a bid opening time and a plurality of buyers enter sealed bids, and wherein said one or more of said items is sold to a buyer having the highest bid at said bid opening time.

6. The system according to claim 2, wherein said seller provides a minimum acceptable bid and a time, wherein said processor is further configured to automatically re-post said one or more of said item if, at said time, no bid has been entered by a buyer which is at least equal to said minimum acceptable bid.

7. The system according to claim 1, wherein said processor further comprises a rebalancer module, said rebalancer module configured to determine, based upon said transaction type entered by said seller, a winning bid from said plurality of bids.

8. The system according to claim 7, wherein said processor is configured to post a multiple item listing, said multiple item listing comprising a plurality of items wherein said seller is willing to sell less than all of said items in a single transaction.

9. The system according to claim 9, wherein said criteria employed by said multi-item optimizer is selectable by said seller.

10. The system according to claim 1, wherein said winning bid is determined based upon a total price of a bid.

11. The system according to claim 1, wherein said winning bid is determined based upon a unit price per item.

12. The system according to claim 1, wherein said winning bid is determined based upon a quantity of items in the bid.

13. The system according to claim 1, wherein said system further comprises a database coupled to said processor.

14. The system according to claim 13, wherein said database is configured to store data corresponding to said buyers and sellers.

15. The system according to claim 13, wherein said database is configured to store data corresponding to a private sales group.

16. The system according to claim 15, wherein said processor is configured to display said posted item only to said at least one buyer belonging to said private sales group.

17. The system according to claim 15, wherein said private sales group comprises a discount membership group.

18. The system according to claim 15, wherein said private sales group comprises persons or organizations in a same company as said seller.

19. The system according to claim 1, wherein said system further comprises an e-mail module wherein said e-mail module is configured to exchange e-mail messages between said seller and a buyer.

20. The system according to claim 19, wherein said e-mail module is further configured to alter an e-mail address of said seller or said buyer prior to exchanging said e-mail messages.

21. The system according to claim 20, wherein said e-mail module encrypts said e-mail addresses prior to exchanging said e-mail messages.

22. A method for facilitating a sale of items via an asset exchange system, said method comprising the steps of:

posting, on an addressable website accessible to at least one buyer and a seller via Internet, upon receipt from said seller, data corresponding to said items;

querying said seller for a preferred transaction type;

defining a sales criteria for determining winning bids from said buyers for a

multiple item listing; and

processing said sale of said items as specified by said seller.

23. The method according to claim 22, further comprising the step of receiving from said at least one buyer a plurality of bids corresponding to said item.

24. The method according to claim 23, further comprising, in response to said query step, selecting a first-come-first-served transaction type, wherein said seller provides a minimum acceptable bid price and said item is sold to a first buyer that enters a bid equal to said minimum acceptable bid price.

25. The method according to claim 23, further comprising, in response to said query step, selecting a standard auction transaction type, wherein said seller provides a minimum acceptable bid price and an auction closing time and a plurality of buyers enter successively larger bids, and wherein said item is sold to a buyer having the highest bid at said auction closing time.

26. The method according to claim 23, further comprising, in response to said query step, selecting a highest-sealed-bid transaction type, wherein said seller provides a minimum acceptable bid price and a bid opening time and a plurality of buyers enter sealed bids, and wherein said item is sold to a buyer having the highest bid at said bid opening time.

27. The method according to claim 23, further comprising the steps of:

said seller providing a minimum acceptable bid price and a time; and

automatically re-post said item if, at said time, no bid has been entered by a buyer which is at least equal to said minimum acceptable bid price.

28. The method according to claim 22, further comprising the step of determining, based upon said transaction type entered by said seller, a winning bid from said plurality of bids.

29. The method according to claim 22, wherein said step of defining said criteria is performed by said seller.

30. The method according to claim 29, wherein said winning bid is determined based upon a total price of a bid.

31. The method according to claim 30, wherein said winning bid is determined based upon a unit price per item.

32. The method according to claim 30, wherein said winning bid is determined based upon a quantity of items in the bid.

33. The method according to claim 22, further comprising the step of storing data in a database.

34. The method according to claim 33, further comprising the step of storing

in said database data corresponding to said buyers and sellers.

35. The method according to claim 33, further comprising the step of storing in said database data corresponding to a private sales group.

36. The method according to claim 35, further comprising the step of displaying said posted item only to said at least one buyer belonging to said private sales group.

37. The method according to claim 35, further comprising the step of displaying said posted item only to a discount membership group.

38. The method according to claim 16, further comprising the step of displaying said posted item only to persons or organizations in a same company as said seller.

39. The method according to claim 22, wherein said method further comprising providing an e-mail module wherein said e-mail module is configured to exchange e-mail messages between said seller and a buyer.

40. The method according to claim 39, further comprising the step of altering an e-mail address of said seller or said buyer prior to exchanging said e-mail messages.

41. The method according to claim 40, further comprising the step of encrypting said e-mail addresses prior to exchanging said e-mail messages.

42. A system for facilitating a sale of items via an asset exchange system, said system comprising:

means for posting, on an addressable website accessible to at least one buyer and a seller via Internet, upon receipt from said seller, data corresponding to said items;

means for querying said seller for a preferred transaction type;

means for defining a sales criteria for determining winning bids from said buyers for a multiple item listing; and

means for processing said sale of said items as specified by said seller.

43. The system according to claim 42, further comprising means for receiving from said at least one buyer a plurality of bids corresponding to said item.

44. The system according to claim 43, further comprising means for, in response to said query step, selecting a first-come-first-served transaction type, wherein said seller provides a minimum acceptable bid price and said item is sold to a first buyer that enters a bid equal to said minimum acceptable bid price.

45. The system according to claim 43, further comprising means for, in response to said query step, selecting a standard auction transaction type, wherein said seller provides a minimum acceptable bid price and an auction closing time and a

plurality of buyers enter successively larger bids, and wherein said item is sold to a buyer having the highest bid at said auction closing time.

46. The system according to claim 43, further comprising means for, in response to said query step, selecting a highest-sealed-bid transaction type, wherein said seller provides a minimum acceptable bid price and a bid opening time and a plurality of buyers enter sealed bids, and wherein said item is sold to a buyer having the highest bid at said bid opening time.

47. The system according to claim 43, further comprising means for said seller providing a minimum acceptable bid price and a time; and

means for automatically re-post said item if, at said time, no bid has been entered by a buyer which is at least equal to said minimum acceptable bid price.

48. The system according to claim 42, further comprising means for determining, based upon said transaction type entered by said seller, a winning bid from said plurality of bids.

49. The system according to claim 42, wherein said method further comprising providing an e-mail module wherein said e-mail module is configured to exchange e-mail messages between said seller and a buyer.

50. The system according to claim 49, further comprising means for altering an e-mail address of said seller or said buyer prior to exchanging said e-mail

messages.

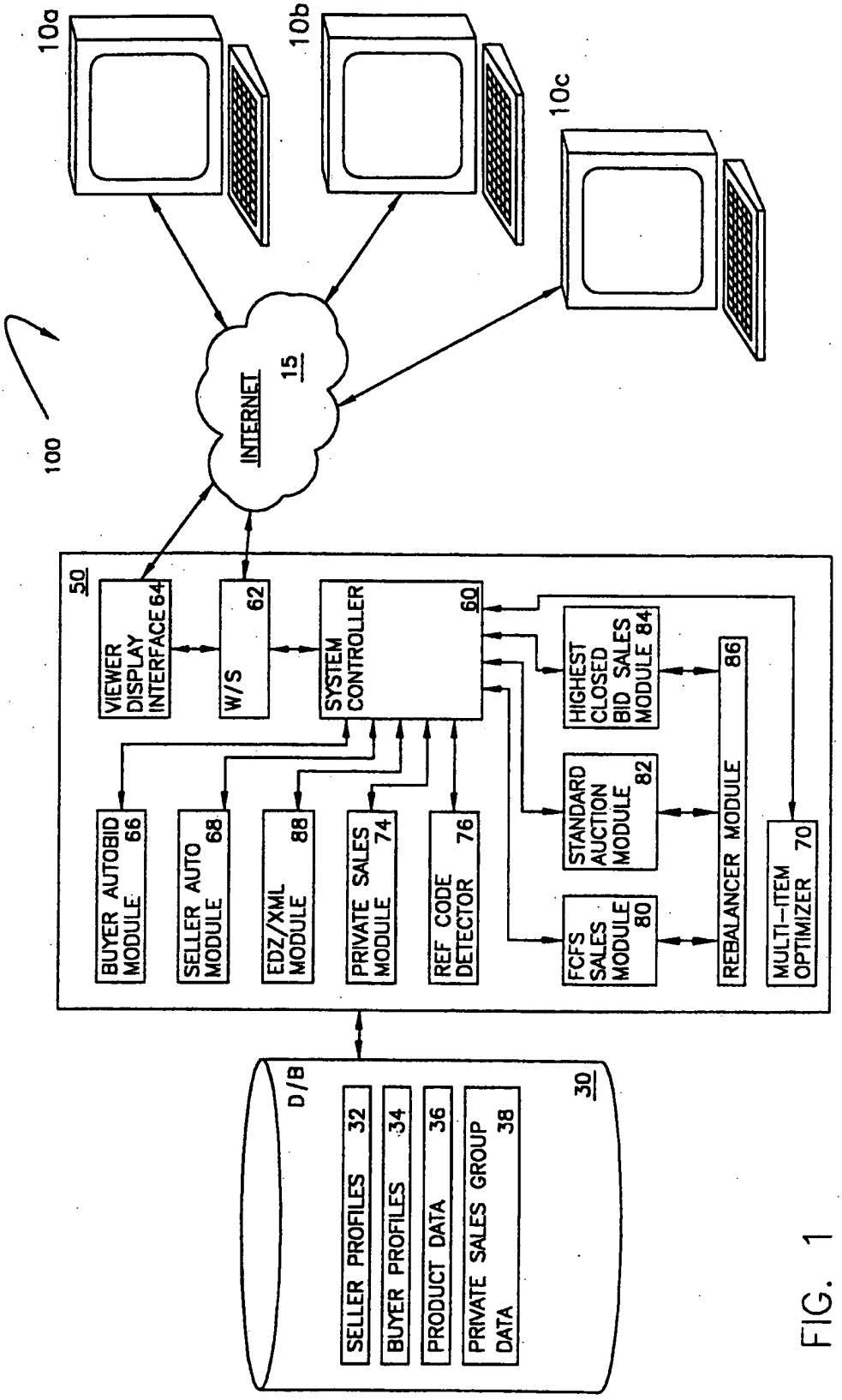

10a
10b
10c
100
INTERNET
15
50
VIEWER DISPLAY INTERFACE 64
W/S 62
SYSTEM CONTROLLER 60
HIGHEST CLOSED BID SALES MODULE 84
STANDARD AUCTION MODULE 82
FCFS SALES MODULE 80
REBALANCER MODULE 86
MULTI-ITEM OPTIMIZER 70
BUYER AUTOBID MODULE 66
SELLER AUTO MODULE 68
EDZ/XML MODULE 88
PRIVATE SALES MODULE 74
REF CODE DETECTOR 76
D/B 30
SELLER PROFILES 32
BUYER PROFILES 34
PRODUCT DATA 36
PRIVATE SALES GROUP DATA 38

FIG. 1

FIG. 2

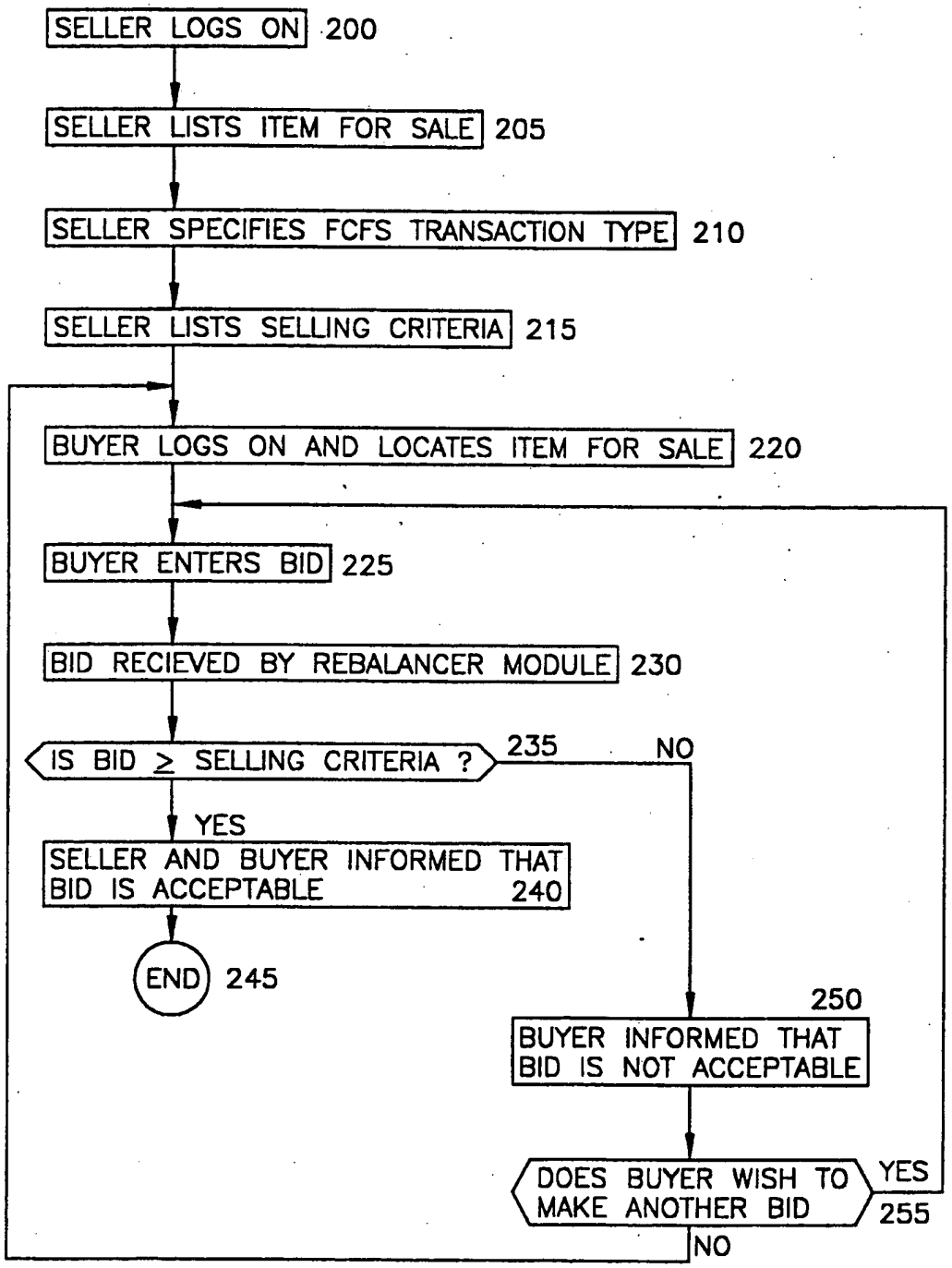

SELLER LOGS ON 200
SELLER LISTS ITEM FOR SALE 205
SELLER SPECIFIES FCFS TRANSACTION TYPE 210
SELLER LISTS SELLING CRITERIA 215
BUYER LOGS ON AND LOCATES ITEM FOR SALE 220
BUYER ENTERS BID 225
BID RECIEVED BY REBALANCER MODULE 230
IS BID ≥ SELLING CRITERIA ? 235
NO
YES
SELLER AND BUYER INFORMED THAT BID IS ACCEPTABLE 240
END 245
250
BUYER INFORMED THAT BID IS NOT ACCEPTABLE
DOES BUYER WISH TO MAKE ANOTHER BID
YES
255
NO

FIG. 3

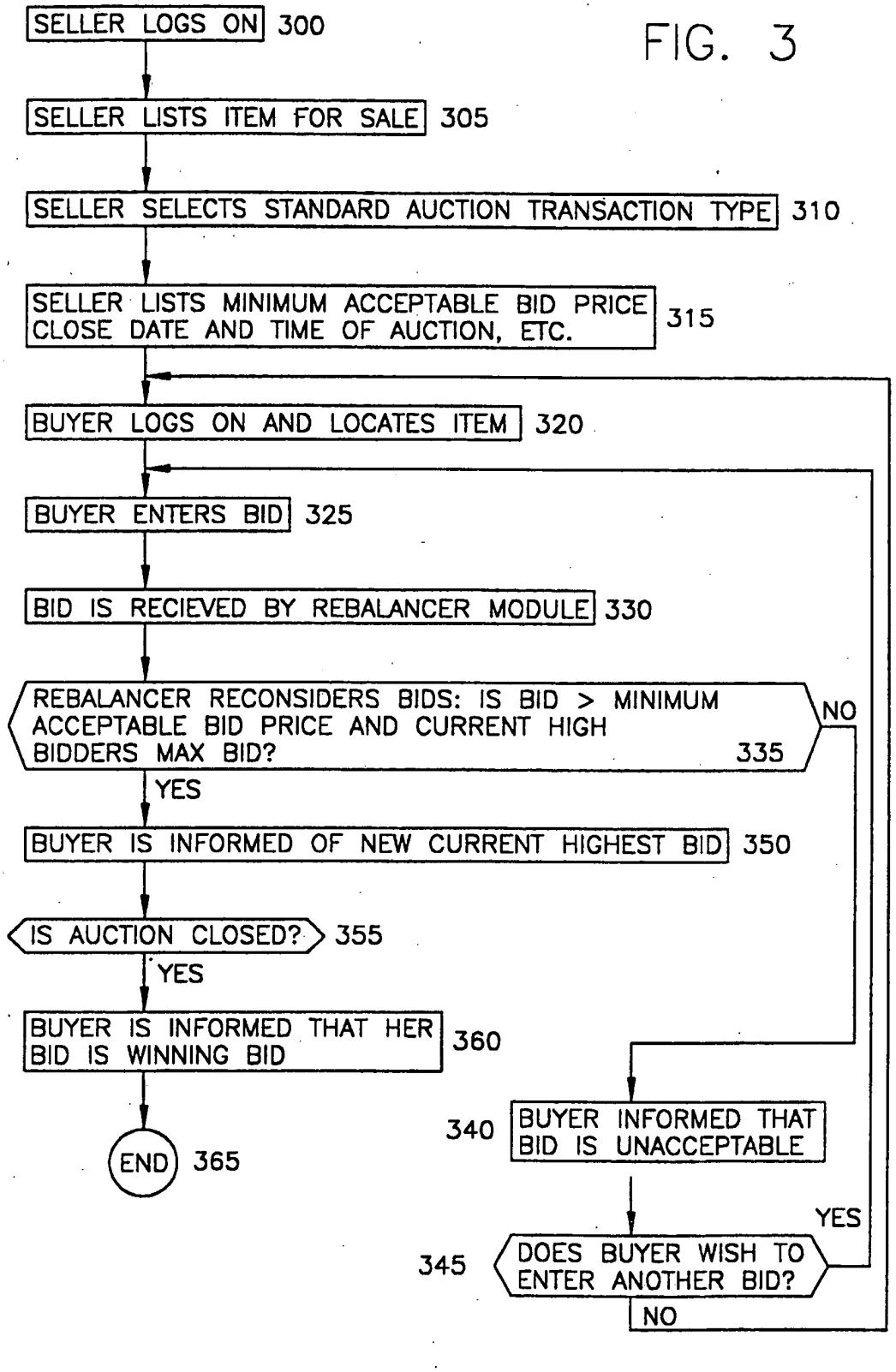

SELLER LOGS ON 300
SELLER LISTS ITEM FOR SALE 305
SELLER SELECTS STANDARD AUCTION TRANSACTION TYPE 310
SELLER LISTS MINIMUM ACCEPTABLE BID PRICE CLOSE DATE AND TIME OF AUCTION, ETC. 315
BUYER LOGS ON AND LOCATES ITEM 320
BUYER ENTERS BID 325
BID IS RECIEVED BY REBALANCER MODULE 330
REBALANCER RECONSIDERS BIDS: IS BID > MINIMUM ACCEPTABLE BID PRICE AND CURRENT HIGH BIDDERS MAX BID? 335
NO
YES
BUYER IS INFORMED OF NEW CURRENT HIGHEST BID 350
IS AUCTION CLOSED? 355
YES
BUYER IS INFORMED THAT HER BID IS WINNING BID 360
END 365
340 BUYER INFORMED THAT BID IS UNACCEPTABLE
YES
345 DOES BUYER WISH TO ENTER ANOTHER BID?
NO

FIG. 4

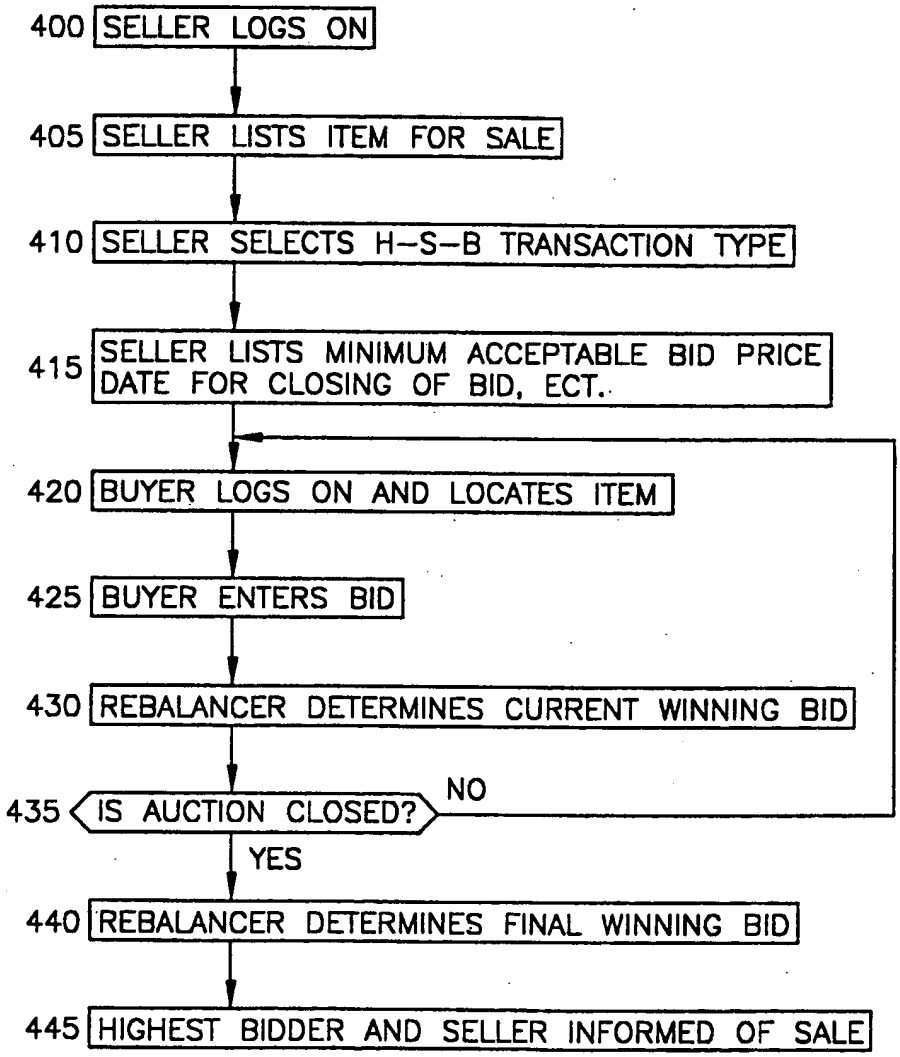

400 SELLER LOGS ON
405 SELLER LISTS ITEM FOR SALE
410 SELLER SELECTS H–S–B TRANSACTION TYPE
415 SELLER LISTS MINIMUM ACCEPTABLE BID PRICE DATE FOR CLOSING OF BID, ECT.
420 BUYER LOGS ON AND LOCATES ITEM
425 BUYER ENTERS BID
430 REBALANCER DETERMINES CURRENT WINNING BID
435 IS AUCTION CLOSED?
NO
YES
440 REBALANCER DETERMINES FINAL WINNING BID
445 HIGHEST BIDDER AND SELLER INFORMED OF SALE

FIG. 5

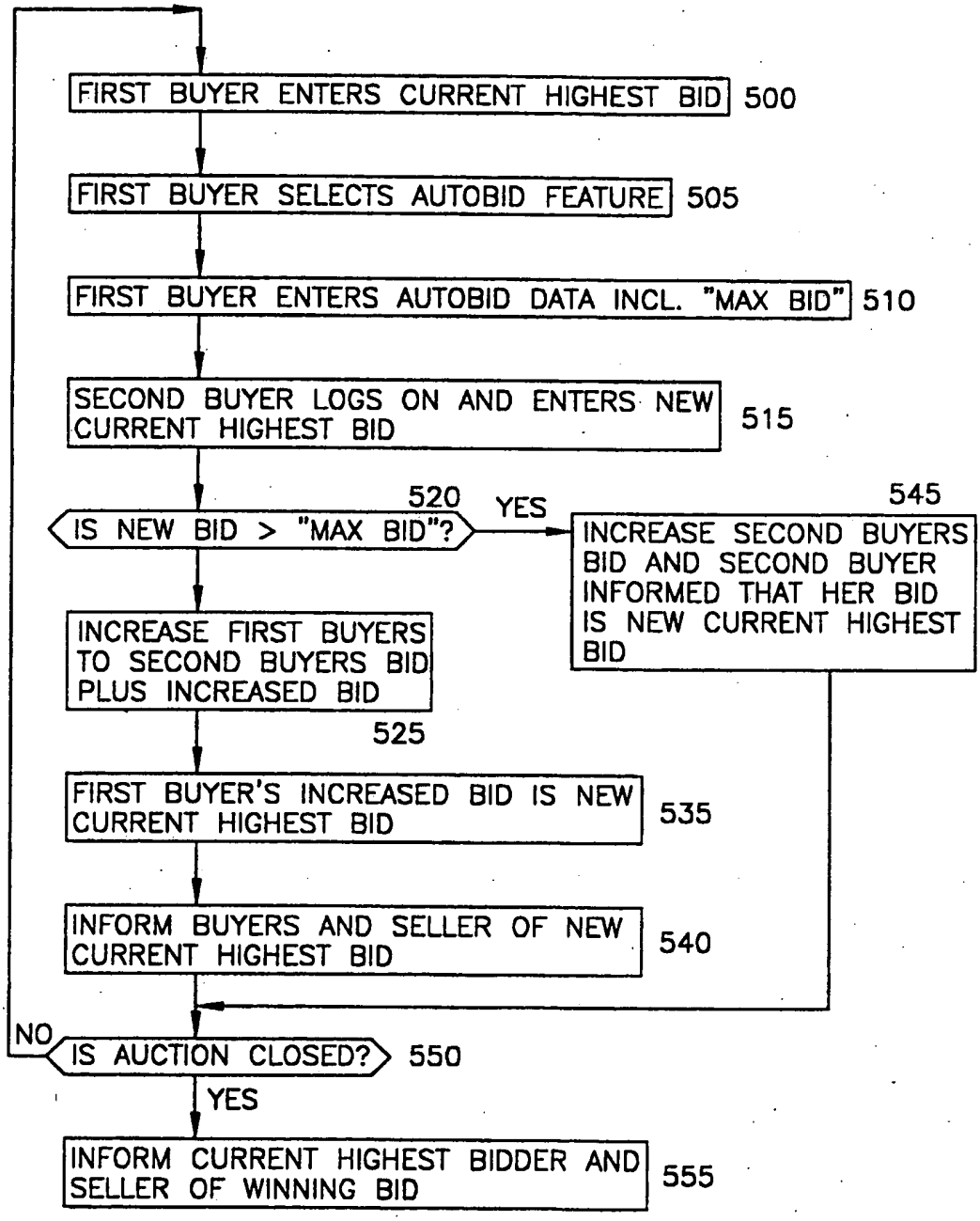
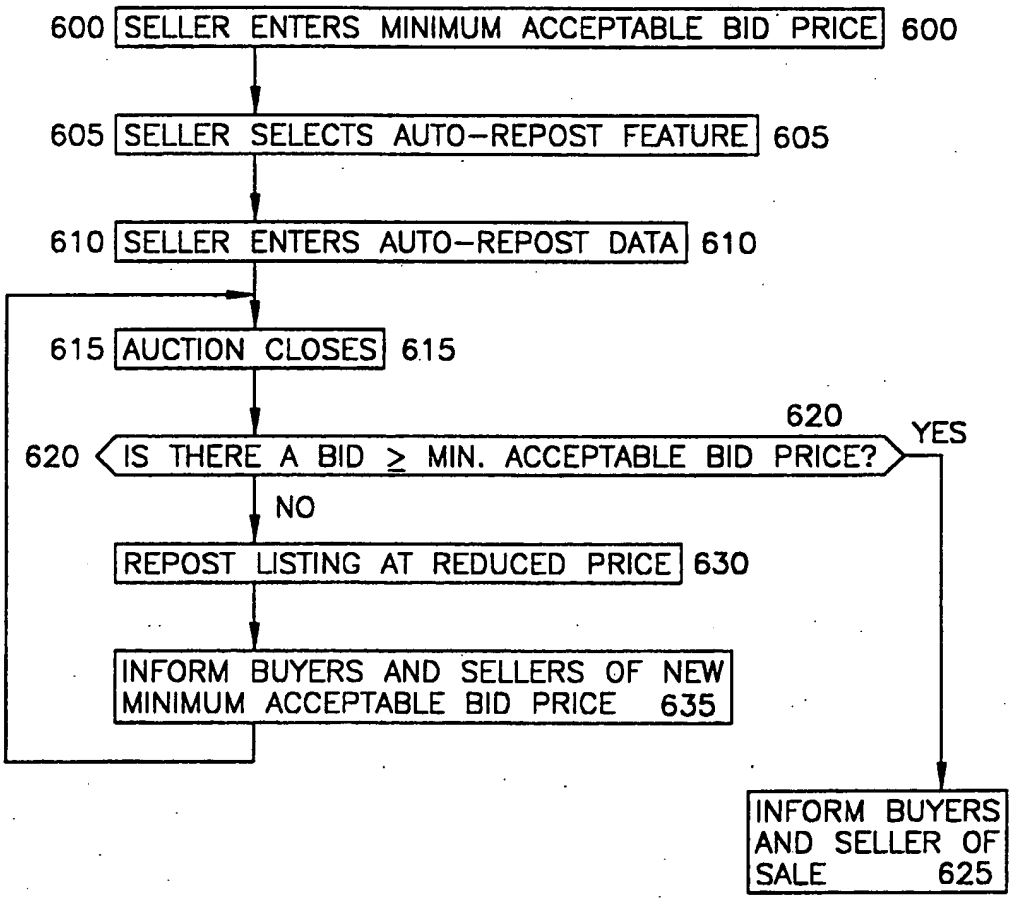
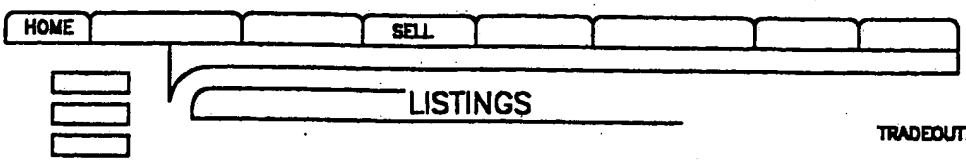

FIRST BUYER ENTERS CURRENT HIGHEST BID
500
FIRST BUYER SELECTS AUTOBID FEATURE
505
FIRST BUYER ENTERS AUTOBID DATA INCL. "MAX BID"
510
SECOND BUYER LOGS ON AND ENTERS NEW CURRENT HIGHEST BID
515
520
IS NEW BID > "MAX BID"?
YES
545
INCREASE SECOND BUYERS BID AND SECOND BUYER INFORMED THAT HER BID IS NEW CURRENT HIGHEST BID
INCREASE FIRST BUYERS TO SECOND BUYERS BID PLUS INCREASED BID
525
FIRST BUYER'S INCREASED BID IS NEW CURRENT HIGHEST BID
535
INFORM BUYERS AND SELLER OF NEW CURRENT HIGHEST BID
540
NO
IS AUCTION CLOSED?
550
YES
INFORM CURRENT HIGHEST BIDDER AND SELLER OF WINNING BID
555

FIG. 6


600 SELLER ENTERS MINIMUM ACCEPTABLE BID PRICE 600
605 SELLER SELECTS AUTO-REPOST FEATURE 605
610 SELLER ENTERS AUTO-REPOST DATA 610
615 AUCTION CLOSES 615
620
620 IS THERE A BID ≥ MIN. ACCEPTABLE BID PRICE?
YES
NO
REPOST LISTING AT REDUCED PRICE 630
INFORM BUYERS AND SELLERS OF NEW MINIMUM ACCEPTABLE BID PRICE 635
INFORM BUYERS AND SELLER OF SALE 625



SELL:

- OVERVIEW
- MY LISTINGS:
- POST LISTINGS
- MODIFY LISTINGS
- REPOST LISTINGS
- VIEW ACTIVE
- VIEW CLOSED
- WANTED ITEMS:
- VIEW WANTED ITEMS

THERE ARE 4 STEPS FOR POSTING PRODUCT ON TRADEOUT.COM:

STEP 1: BASIC INFORMATION
STEP 2: CATEGORY SELECTION
STEP 3: PRODUCT AND SALE DETAILS
STEP 4: REVIEW AND FINAL AUTHORIZATION

STEP 1: BASIC INFORMATION

PRODUCT LOCATION

WHERE IS YOUR ITEM LOCATED?

● UNITED STATES

705

710

QUANTITY
HOW MANY ITEMS ARE FOR SALE?

700

◉ ONE ITEM

○ MORE THAN ONE ITEM AND ALL ITEMS ARE IDENTICAL

○ MORE THAN ONE ITEM, ALL ITEMS ARE NOT IDENTICAL AND THEY ARE TO BE SOLD AS ONE LOT

(NOTE: ITEMS THAT ARE NOT IDENTICAL MUST BE POSTED SEPARATELY OR ALL MUST BE SOLD AS ONE LOT).

715

SALE TYPE
WHAT TYPE OF SALE SHOULD BE USED?

SALE TYPE	DESCRIPTION	RECOMMENDED
◉ FIRST COME FIRST SERVED	SET AN ASKING PRICE, FIRST BIDDER AT PRICE BUYS THE LISTING	IF PRIMARY GOODS SELL QUICKLY
○ STANDARD AUCTION	SET ASKING PRICE, SALE DURATION. BUYERS PLACE INCREASING BIDS, SALE CLOSES. HIGHEST BID WINS.	IF PRIMARY GOODS GET HIGHEST BID
○ HIGHEST SEALED BID	SET ASKING PRICE, SALE DURATION. BUYERS PLACE SEALED BIDS. HIGHEST BID WINS.	IF PRIMARY GOODS CONFIDENTIALITY PLACED

SUBMIT

FIG. 7a

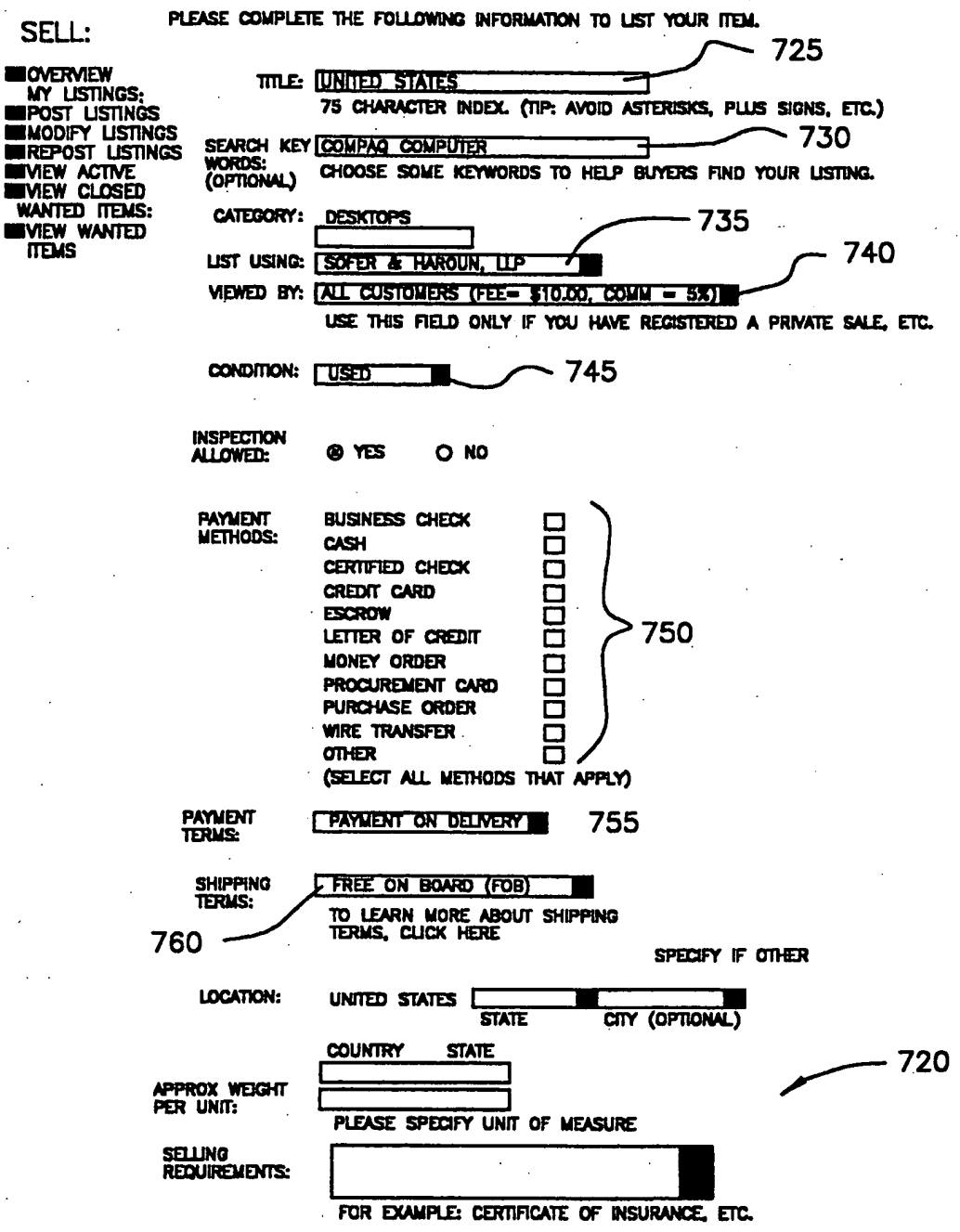


FIG. 7b (SHEET 1)

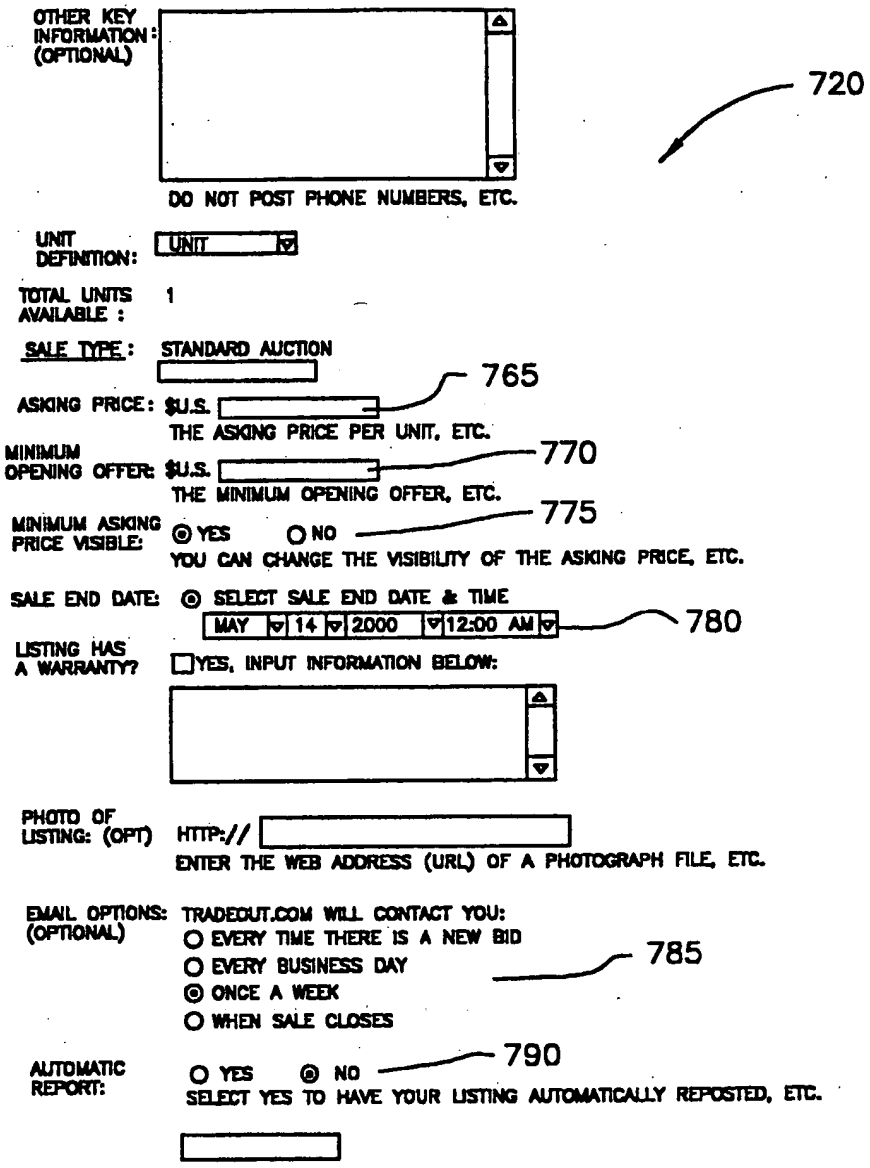


FIG. 7b (SHEET 2)

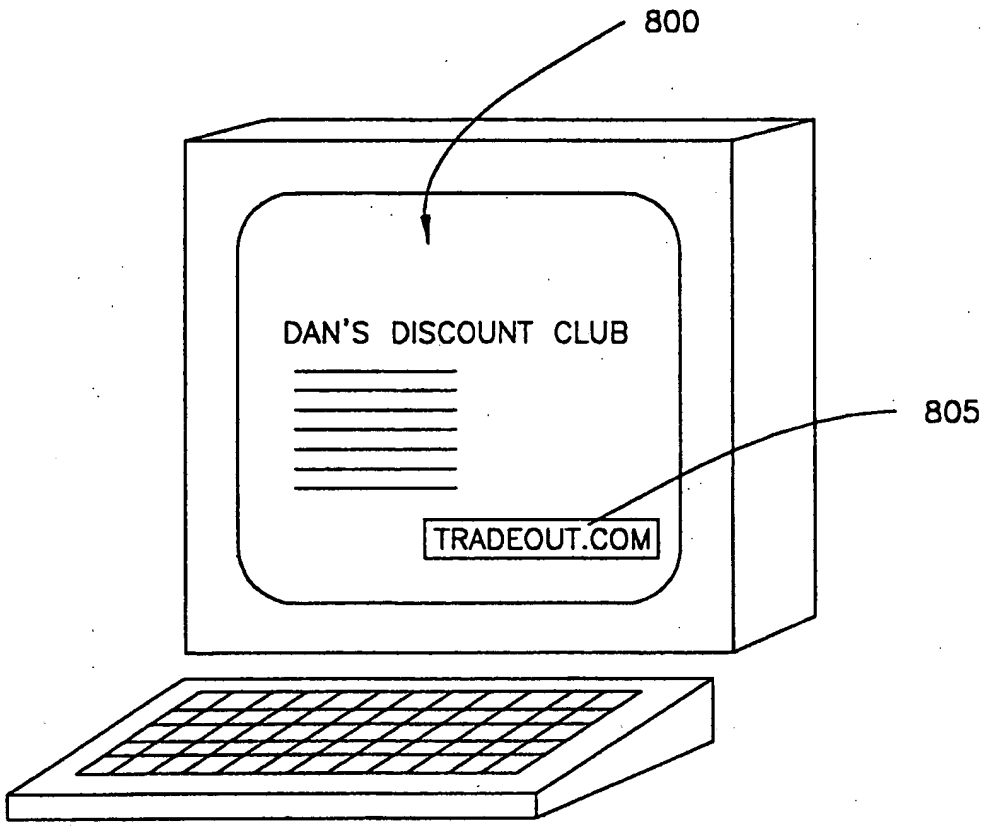


FIG. 8

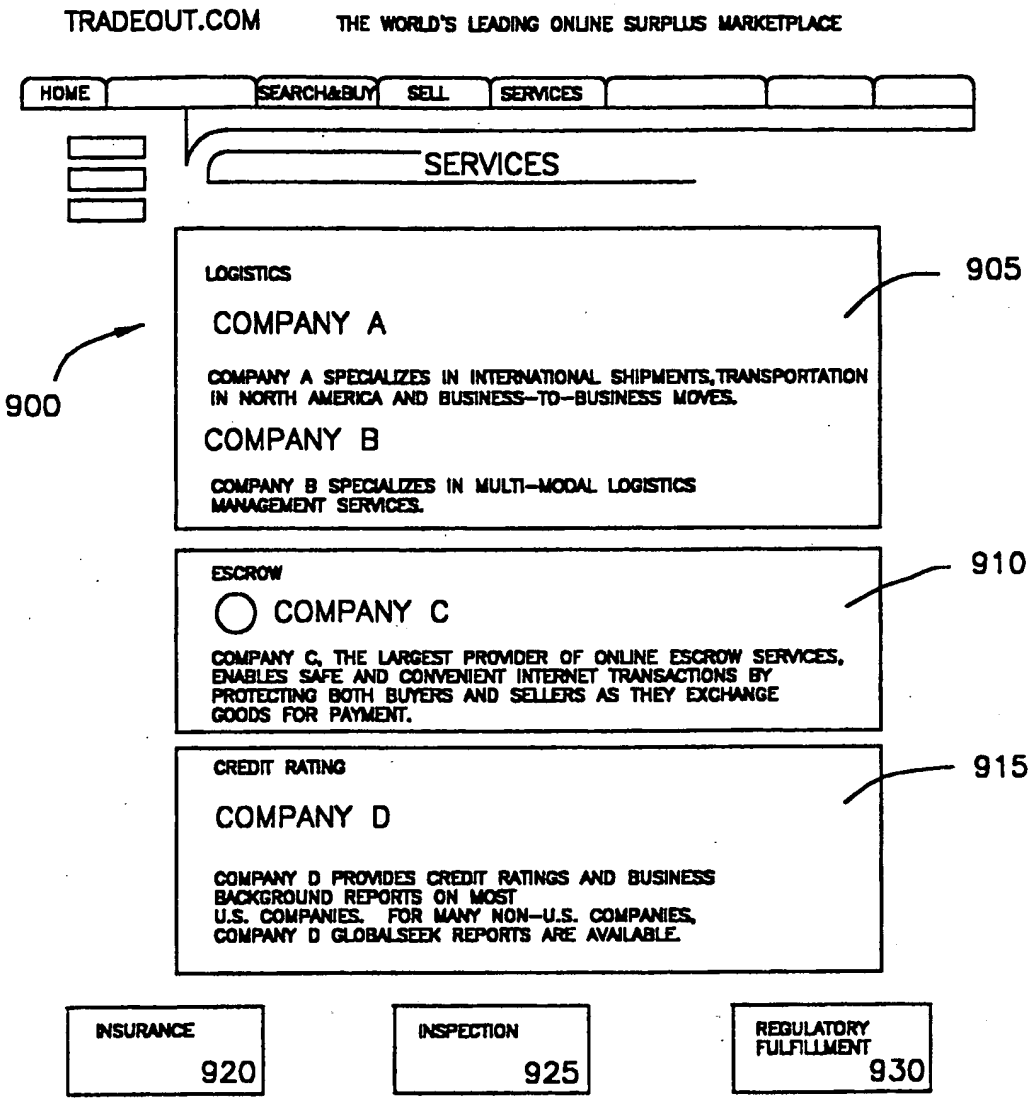

TRADEOUT.COM
THE WORLD'S LEADING ONLINE SURPLUS MARKETPLACE
HOME
SEARCH&BUY
SELL
SERVICES
SERVICES
900
LOGISTICS
905
COMPANY A
COMPANY A SPECIALIZES IN INTERNATIONAL SHIPMENTS, TRANSPORTATION IN NORTH AMERICA AND BUSINESS-TO-BUSINESS MOVES.
COMPANY B
COMPANY B SPECIALIZES IN MULTI-MODAL LOGISTICS MANAGEMENT SERVICES.
ESCROW
910
COMPANY C
COMPANY C, THE LARGEST PROVIDER OF ONLINE ESCROW SERVICES, ENABLES SAFE AND CONVENIENT INTERNET TRANSACTIONS BY PROTECTING BOTH BUYERS AND SELLERS AS THEY EXCHANGE GOODS FOR PAYMENT.
CREDIT RATING
915
COMPANY D
COMPANY D PROVIDES CREDIT RATINGS AND BUSINESS BACKGROUND REPORTS ON MOST U.S. COMPANIES. FOR MANY NON-U.S. COMPANIES, COMPANY D GLOBALSEEK REPORTS ARE AVAILABLE.
INSURANCE
920
INSPECTION
925
REGULATORY FULFILLMENT
930

FIG. 9